Update instructions

4ESS™ Switch Product Release Document
4E25 Release 1 Generic
234-090-251AC

Overview   This package contains a "History of revisions" sheet and updates for Product Release Document (PRD) 234-090-251AC, Issue 1.

Instructions   This "Update instructions" sheet may be disposed of after placing in the added or revised pages in the PRD or it may be retained. If retained, file this sheet in the ring binder immediately following the title page.

Revisions   The following chapter is corrected:
Chapter 5 – AT&T Digital Link Phase V Architecture Feature (6938). On Page 5-96, paragraph 2, the Recent Change message is corrected.

The following Chapter is added:
Chapter 16 – Modified No-Loopback Continuity Check Feature (7815)

Remove old	Insert new (Revision 1)
Contents and About This IP	Contents and About This IP
Pages 5-95 and 5-96 (Feature 6938)	Pages 5-95 and 5-96 (Feature 6938)
-	Chapter 16 (Feature 7815)
Chapter 16 (Release Summary)	Chapter 17 (Release Summary)
Pages B-21 and B-22 (Master Index)	Pages B-21 and B-22 (Master Index)

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History of revisions
4ESS™ Switch Product Release Document
4E25 Release 1 Generic
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Overview Always retain the latest "History of Revisions" sheet. File in the Product Release Document (PRD) binder immediately following the "Update instructions" sheet (if retained) or immediately following the title page.

Revisions The following is a history of revisions.

Revised Item	Revision date	Reason for revision
Contents and About This IP	February 2000	Add new feature
Pages 5-95 and 5-96 (Feature 6938)	February 2000	Correct RC Message on Page 5-96
Chapter 16 (Feature 7815)	February 2000	Add new chapter
Chapter 17 (Release Summary)	February 2000	Update release summary
Pages B-21 and B-22	February 2000	Update PRD Index

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Chapter 2   4ESS 3B APS Update to Real-Time Reliable (RTR) 21.30 Feature (552)

Chapter 3   Modification Request (MR) to 4ESS Switch Local Service for Nodal Customers – Phase 1 Feature (5370i)

Chapter 4   Capacity Relief on 1B Processor Memory Feature (6888)

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About this information product

Purpose   The purpose of the Product Release Document (PRD) is to provide customers with information pertaining to the new features that are introduced in the *4ESS* switch. A PRD is written to cover the features introduced in full generic releases and quarterly generic releases. This particular PRD provides information pertaining to the new features included in the 4E25 Release 1 Generic, plus features that are released as Software Change Packages (SCPs).

Safety Labels   There are three types of safety labels used in Lucent Technologies documentation: DANGER, WARNING, and CAUTION. This document contains safety labels in the form of CAUTIONS. A CAUTION safety label indicates the presence of a hazard that will or can cause minor personal injury or property damage if the hazard is not avoided.

Scope The Product Release Document provides customers with information not covered in other *4ESS* switch documentation. It is not a replacement for other documentation such as Standard Lucent Technologies Practices, Task Oriented Practices (TOP), Maintenance Reference Handbooks, etc. that support the *4ESS* switch. The information in this document is intended only for the introduction of the new 4E25 Release 1 features, not the long-term maintenance.

Intended Audience The document is intended for people involved in testing, provisioning, maintenance, administration, and technical support of the *4ESS* switch. Feature managers, Integrated Test Network (ITN) personnel, field support, Network Control Center (NCC), Product Engineering Control Center (PECC), and National Electronic Switching Assistance Center (NESAC) personnel are examples of some of the people who will use the PRD.

How to Use This Document The PRD for 4E25 Release 1 Generic and 4E24 SCPs contains 13 new features. Each chapter in this document provides information about these features. The chapters are in numerical order according to feature number. The chapter titles are also the feature names.

The following is a list of the chapters contained in this document with a brief description of each feature:

> **Important!** Because some features were added at a late date, not all features are in given in feature number order (Feature 568 is at the end).

Chapter 1: *Grow D-Channel Node Capability From 106 to 130 Feature (521)*

This feature describes the increase of the maximum number of D-Channel Nodes on the *4ESS*™ switch.

Chapter 2: *4ESS 3B APS Update to Real-Time Reliable (RTR) 21.30 Feature (552)*

This feature provides a software upgrade of the *4ESS* APS OS software from RTR 21.17 to RTR 21.30. This software upgrade is used as the base for the 4E25 Release 1 Generic and 4AP18 generic loads.

Chapter 3: *Modification Request (MR) to 4ESS Switch Local Service for Nodal Customers – Phase 1 Feature (5370i)*

This feature extends the support of the *4ESS*™ switch to generate and respond to Circuit Validation Test message parameters.

Chapter 4: *Capacity Relief on 1B Processor Memory Feature (6888)*

This feature provides capacity relief on the 1B memory by improving the data structure usage efficiency and by moving the static structures to the Windowed Call Store (WCS).

Chapter 5: *AT&T Digital Link Phase V Architecture Feature (6938)*

The AT&T Digital Link–Phase V (ADL–V) provides the Business Markets Division (BMD) customers the capability to send both their local and nodal traffic on one combined trunk group from their Private Branch Exchange (PBX) switched directly to an AT&T End Office (EO).

Chapter 6: *Further Expansion of the Operator Service Position System (OSPS) ID Table Feature (7064)*

This feature expands the 10-digit entries in the Operator Service Position System (OSPS) Access ID Table in the *4ESS*™ switch from 1024 to 6144 and increases the number of OSPS IDs from 256 to 1000.

Chapter 7: *Restructure and Grow the Call Register Feature (7254)*

This feature frees up Real-Time to support additional call capacity. It is estimated that this feature saves approximately 0.4 to 1.0 percent of 1B time.

Chapter 8: *Killing Fraudulent Software Defined Network/Network Remote Access Calls Feature (7312)*

This feature specifies the requirements to kill fraudulent Software Defined Network (SDN) Network Remote Access (NRA) calls. The Global Network Fraud Management Center (GNFMC) of AT&T monitors and controls fraud for various AT&T services.

Chapter 9: *ANC NANP CIC Routing Feature (7323)*

This feature allows AT&T Network Connection (ANC) subscribers to route their POTS traffic to a special (non-AT&T) network switch for call routing. Specific Carrier Identification Codes (CICs) are associated with this service, and a special routing number is built based on CIC and possibly Numbering Plan Area (NPA).

Chapter 10: *Transfer Connect on ATP – Out-of-Band Trigger and Data Enhancement Feature (7335)*

This feature increases the capabilities provided in Features 4875 and 5892. These enhancements provide the following:

- Out-of-Band (OOB) error messages

- Ability to pass User-to-User (UUI) OOB data in a FACility message and transferring it to the target party

- Three new generic actions—Enable User OOB, Send Facility Message, and Screen OOB data.

Chapter 11: *1-Digit Translation Table Expansion Feature (7344)*

This feature expands the capacity of the 1-Digit Translation Table from 4096 entries to 8192 entries.

Chapter 12: *Mandatory 10 Digits on LSP_LOCAL Trunks Feature (7429a)*

This feature requires that 10 digits be delivered on all calls to the *4ESS™* switch over Local Service Provider – Local Trunks (LSP_LOCAL) trunks. This is done by removing the prefixing of the far end Numbering Plan Area (NPA), performed as part of the processing of the served NPA.

Chapter 13: *Expansion of LACIDS to Support 856 D-Channels Feature (7501)*

This feature is a Modification Request (MR) to Feature 5361, *4ESS™ Interim D-Channel Expansion;* it increases the maximum number of Logical Access Identifiers (LACIDs) in the *4ESS* switch Direct Link Node (DLN), and in the Dynamic Engineering Mechanized System (DEMS)/Data Acquisition Report Integrated Communications System (DARICS) from 511 LACIDs to 856 LACIDs.

As a result of several features (5020/5361/521), the maximum number of D-Channels was increased to 856. To support the growth of the D-Channel (especially in the simplex mode), each D-Channel needs a separate and distinct LACID (856).

Chapter 14: *Procedure for Growing ATP TSGs feature (7701)*

This feature creates an Office Data Assembler (ODA) retrofit or stand-alone rule to add spare AT&T Trigger Platform (ATP) Trunk Subgroups (TSGs). When an office reaches less than 4 available spare in-service ATP TSGs, the new retrofit or stand-alone rule provides up to 4 spare ATP TSGs up to a maximum of 64.

Chapter 15: *3B20D and 3B21D Disk Replacement (9GB Disk) feature (568)*

This feature introduces a new 9GB Small Computer Systems Interface (SCSI) disk drive to replace the existing 4GB SCSI disk drive.

Chapter 16: *Modified No-Loopback Continuity Check Feature (7815)*

This feature modifies the Continuity Check Test (CCT) by:

- Causing the switch to execute the loopback version of the CCT test if the first attempt of the no-loopback test fails. If both attempts fail, the call is killed.

- Providing the ability to exclude the no-loopback test executed automatically during call processing on a Trunk Subgroup (TSG) basis.

- Allowing the timer set for the automatically executed no-loopback test to be a tunable parameter.

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Chapter 17: *Release Summary – 4E25 Release 1 Generic.*

This chapter summarizes several aspects of the features in this document. This chapter identifies Growth and Retrofit documents (if any) affected by this release; new, changed, or deleted input and output messages; Operations Support Systems impacts of the release; and new or changed alarms and measurements. The final section of this chapter tells how each of the new features is turned on and off.

How to Comment on This Document

Lucent Technologies welcomes your comments on this document. Your comments will aid us in improving the quality and usefulness of Lucent Technologies documentation. Please use the Feedback Form provided in the front of this document. Mail the form to the address provided on the back of the feedback form, or fax to 1-407-767-2760. Comments on this PRD document may also be phoned in to 1-630-979-2897.

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Within the United States: 1-888-LUCENT-8

From Canada: 1-800-255-1242

FAX: 317-322-6484

B. Output Form 3af

This form is used to verify the II digit(s) assigned Service Type. The layout of this form is not changing. However, the form is modified to allow two new SRVCT entries **P5SDN** and **P5MGC**.

C. Output Form 3ag

This form is used to verify the OLI value(s) assigned Service Type. The layout of this form is not changing. However, the form is modified to allow two new SRVCT entries **P5SDN** and **P5MGC**.

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Recording (Not Affected)

Network Management (Not Affected)

Maintenance/Troubleshooting

A new Final-Handling Code (FHC) as described in Table 5-K has been developed to support this feature.

Table 5-K - New Final-Handling Code

FHC	Description
1814	**Last Normal Condition:** A call arrived on an Local Carrier Connecting (LCC) ISUP trunk for which the FEALN field is set and the feature bit is set. A Called Party Number with the Network Access Interrupt (NAI) set to Action Point Number (APN) is received in the IAM. **Irregular Condition:** Equal Access ANI type is not SDN. **Handling:** The IC trunk is connected to the Vacant Code Announcement (VAC) or an ISUP Release message with cause for the VCA is sent. The call is not allowed to route.

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Transition Considerations

Related Features   This feature is related to or depends on the following features:

- Feature 5371—*End Office Local Nodal Phase 1* (4E23 Release 1 Generic)
- Feature 5538—*Local Nodal Phase 2.1 8YY Screening* (4E22 Release 4 Generic)
- Feature 6685—*ADL Phase 3–EA Presubscription Capabil*ity (4E24 Release 2 Generic)
- Feature 6990—*ADL Phase 3–EA Dial-Around Capability* (4E24 Release 3 Generic).

Feature Deployment   It is not necessary for the 4E25 Release 1 Generic to be deployed in all *4ESS* switches in the network for this feature to be fully operational.

Feature Activation   This feature is activated by a 1B Processor Recent Change using RC Form 809. In order to turn this feature on, existing Feature 5538 (Item PF37) and Feature 5371 (Item PF34) must be turned on. If these features are active in the switch, the FEATURE ITEM field for Feature 6938 is set to **PF73** and the ON OR OFF field is set to **ON**.

The following 3B Recent Change must be performed to turn off the DLN IAM Intercept feature:

1. At the 3B RC/V Channel, build a new file in the *UNIX*® directory using the following command:

   /database/gttx/app_C
2. In the new file, enter the following recent change message:

   RC:SD;SD0000001;F;1:(O,A,48,49)!
3. Activate the file by entering the following message in the 3B application:

   start:fta,app core,file [Your File Name]

4. Verify activation by entering the following command:

   ver:sd;oli

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16   Modified No-Loopback Continuity Check Feature (7815)

Overview

Description   This feature modifies Feature 6231, No-Loopback Continuity Check Test (CCT) by:

- Eliminating the use of the No-Loopback CCT test on call processing second attempt tests.

- Providing the ability to exclude the no-loopback test executed automatically during call processing on a Trunk Subgroup (TSG) basis.

- Allowing the timer set for the automatically executed no-loopback test to be a tunable parameter.

Objectives   This chapter provides the user with information on the feature description, call flow, provisioning, maintenance and troubleshooting, and transition considerations.

Contents   This chapter contains the following topics:

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Description

Background

The No-Loopback Continuity Check feature was deployed in Generic 4E23, Release 4 as Feature 6231. This feature provided a no-loopback test to aid in discovering where a looping plug had been erroneously left behind by maintenance personnel. The inability to determine when a facility is already (and erroneously) in double loop-back mode has resulted in blocked calls and loss of subscribers. Feature 6231 would identify erroneous looping plugs, however additional modifications are made in Feature 7815. These modifications eliminate the use of the No-Loopback CCT test on call processing second attempt tests, provide the ability to exclude the no-loopback test executed automatically during call processing on a Trunk Subgroup (TSG) basis, and allow the timer set for the automatically executed no-loopback test to be a tunable parameter.

Feature Description

This feature modifies the Continuity Check Test (CCT) capability. The Continuity Check Test is run both automatically in the network, based on a percentage basis set at the trunk level identified at each *4ESS* switch, and on demand. The Continuity Check Test runs automatically and alternates between requesting the next switch to establish a loopback or not. When the call-processing test is automatically executed and a loopback is requested, if the tone generated by the first switch is returned, the test passes. If not, a final handling code (FHC) is generated. When the test is executed and a loopback is not requested, if the tone generated by the first switch is returned, the test fails and a FHC is generated. If the tone is not returned, the test passes.

When a CCT test is executed, if the first test fails, a second attempt is made. If the second attempt also fails, the call is killed. This feature modifies only the no-loopback version of the test so that if the first attempt fails, the switch reverts to executing the old loopback version of the test. If this test also fails, the call is killed. This feature also provides the capability for the no-loopback version of the test to be excluded on a TSG basis, and it changes the previously specified no-loopback automatic test timer value (of 240 ms) to be a tunable parameter.

Call Flow

Existing Call Flow   The CCT, also known as Voicepath Assurance (VPA) test, is automatically executed during call processing and on demand in response to technician request. There are two versions of the test (with the introduction of Feature 6231), the loopback version (or old CCT test) and the new (Feature 6231) no-loopback version. The switch alternates between the two versions of the test. For the loopback version, the test is run in two parts:

(a) The initiating switch sends a tone for at least 60 ms and cease when both 60 ms of tone was sent and 30 ms (or more) of tone has been received.

(b) After cessation of tone transmittal, at least 40 ms of silence is detected.

The shortest test interval on a "short" trunk is approximately 100 ms. A "long" trunk (non-satellite) of about 3000 miles would add approximately 32 ms to the test interval. Note that these times do not include any delays for initial address message (IAM) transmittal. For the no-loopback version of the test, the switch sets the Continuity Check Indicator bits in the Nature of Connection Indicator field in the IAM to "Continuity Check performed on a previous circuit" (causing the far-end switch *not* to establish a loopback). The first switch then applies the tone and starts a 240-ms timer. If the tone is returned before the timer expires, the switch generates a FHC indicating that the test failed. If the tone is not returned before the timer expires, the test passes and the first switch sends a "Continuity Test Successful" (COT) message indicating success to the second switch. **End of call flow.**

Automated CCT Call Flow   For the automated CCT, each switch in a call path determines when to initiate a continuity test on the trunk to the next switch based on the Voicepath Cancellation Rate (VCR) value set at the trunk level in that switch. When a call is initiated, the IAM indicates to the next switch in the Continuity Check Indicator bits in the Nature of Connection Indicators field one of the following possible options:

   1 CCT not required
   2 CCT required on this circuit
   3 CCT performed on a previous circuit.

When a switch receives "CCT not required", the switch does not wait for a Continuity or COT message from the previous switch before returning an address complete message to the previous switch. When a switch receives "CCT required on this circuit", it establishes a loopback and notifies the next switch in the path (if any) either

• that "CCT performed on a previous circuit" or

- it initiates its own "CCT required on this circuit" if the trunk to the next switch is also to be tested.

Any switch that receives either "CCT required on this circuit" or "CCT performed on a previous circuit" does not return the address complete message to the previous switch until it receives the COT message (indicating a successful continuity test).

For the no-loopback case, when a switch determines that a "no-loopback" continuity test should be run on the trunk to the next switch, it sends "CCT performed on a previous circuit." This causes the next switch not to establish a loopback but also causes it to wait for a COT message before returning the address complete message. The first switch (which is initiating the modified CCT) generates a FHC if the tone is returned. If the tone is not returned, the facility test passes and the switch sends the COT message indicating a successful test to the next switch. As a result of this feature, if the no-loopback test fails, the switch reverts to the loopback version of the test for the second attempt. If that fails, the call is killed. **End of call flow.**

Modified Automated CCT Call Flow

On trunks for which the trunk exclusion bit is not set and for a call subject to CCT, the switch may execute the old loopback CCT test. (Note that the switch alternates between the no-loopback version of the test and the looped version of the test on a per-CCT outgoing attempt on an eligible trunk.) Assuming the old loopback CCT test is performed on this call, if the first attempt fails, a final handing code is identified and a second attempt using the old loopback CCT test is made. If this test also fails, a final handing code is generated and the call is killed. The next time a CCT is indicated for a call, the no-loopback version of the test is executed. If the first attempt fails, an informational final handling code (FHC 1978) is generated and a second attempt using the *old loopback* version of the test is executed. If this attempt also fails, a final handling code is generated and the call is killed. **End of call flow.**

On trunks for which the trunk exclusion bit is set, only the old loopback CCT test is used. The exclusion bit prohibits execution of the automatic no-loopback version of the test on that trunk. This bit is set for trunks connected to switches that do not respond appropriately to the "Continuity Check performed on a previous circuit" field in the IAM (i.e., Excel switches). **End of call flow.**

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Provisioning

Recent Change Forms 100, 102, 107, and 109

For 4E25 generics, the spare field **S9** on forms 100, 102, 107, and 109 is used to determine whether the No-Loopback Continuity Check Test is allowed or prohibited. The test is applicable only to ISDN User Part (ISUP) trunks. This parameter can have the values:

- Blank or N (DEFAULT) = The No-Loopback Continuity Check Test is allowed.

- Y = The No-Loopback Continuity Check Test is prohibited.

For 4E26 and later generics, the new Trunk Subgroup field **PNLCT** (Prohibit No-Loopback Continuity Check Test) on forms 100, 102, 107, and 109 is used to determine whether the No-Loopback Continuity Check Test is allowed or prohibited. The test is applicable only to ISUP trunks. This parameter can have the values:

- Blank or N (DEFAULT) = The No-Loopback Continuity Check Test is allowed.

- Y = The No-Loopback Continuity Check Test is prohibited.

These forms are shown as follows in Division 7 of the TG-4 document:

- RC Form 100 – **RC:TSG;NEW;OPT(TWOWAY)**

- RC Form 102 – **RC:TSG;NEW;OPT(OUT1WAY)**

- RC Form 107 – **RC:TSG;CHG;OPT(TWOWAY)**

- RC Form 109 – **RC:TSG;CHG;OPT(OUT1WAY)**

Output Verify Forms 1a, 1c, and 1e

For 4E26 and later generics, the new Trunk Subgroup field **PNLCT** on verify output forms 1a, 1c, and 1e is used to indicate the status of the No-Loopback Continuity Check Test. This parameter can have the values: Y or N. These forms are shown as follows in Division 8 of the TG-4 document:

- Verify Form 1a - **VER:TSG,OPT(TWOWAY)**

- Verify Form 1c - **VER:TSG,OPT(OUT1WAY)**

- Verify Form 1e - **VER:TSG;OPT(LIST)**

Verify Input Message 11d

For 4E26 and later generics, a new optional field **PNLCT** is added on input verify message 11d. This parameter can have the values: Y or N. This form is shown as follows in Division 8 of the TG-4 document:

- Verify Message 11d - **VER:TSGLIST**

SNOW-T

Service Now Trunking (SNOW-T) supports administration of the TSG exclusion bit via NET. The exclusion bit prohibits execution of the automatic no-loopback version of the CCT test on that trunk. (Note that the exclusion bit does not affect the ability to manually execute the no-loopback version of the test.) This bit should be set for ISUP trunks connected to switches that do not respond appropriately to the "Continuity Check performed on a previous circuit" (i.e., they *always* establish a loopback).

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Recording (Not Affected)

Network Management (Not Affected)

Maintenance and Troubleshooting

Timer   The timer for the no-loopback version of the CCT is tunable as low as 150 ms to reduce transceiver holding time. The default value is 240 ms. This parameter is administered using RC Form 800 or the TTY command **IN:OWBUF**.

Final Handling Codes   With this feature, both FHC 1977 (second attempt no-loopback) and FHC 1978 (first attempt no-loopback) remain, however FHC 1977 applies only to manually requested no-loopback CCT tests.

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Transition Considerations

Feature Deployment   Full deployment of this feature in the network is not necessary for this feature to be fully operational.

Feature Activation   For 4E25 generics, the spare field **S9** on forms 100, 102, 107, and 109 is used to determine whether the No-Loopback Continuity Check Test is allowed or prohibited. The test is applicable only to ISUP trunks. This parameter can have the values:

- Blank or N (DEFAULT) = The No-Loopback Continuity Check Test is allowed.

- Y = The No-Loopback Continuity Check Test is prohibited.

For 4E26 and later generics, the new Trunk Subgroup field **PNLCT** on forms 100, 102, 107, and 109 is used to determine whether the No-Loopback Continuity Check Test is allowed or prohibited. The test is applicable only to ISUP trunks. This parameter can have the values:

- Blank or N (DEFAULT) = The No-Loopback Continuity Check Test is allowed.

- Y = The No-Loopback Continuity Check Test is prohibited.

Feature bit PF53, which is used to turn ON and turn OFF Feature 6231, also activates/deactivates Feature 7815. Recent Change form 809 is used to populate feature bit PF53.

Feature Dependencies   This feature is dependent on, and modifies, Feature 6231 (No-Loopback Continuity Check).

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Input/Output Manual Pages

Input Message   In generics 4E26 and later, the following input message is modified to add the **PNLCT** field:

- **VER:TSGLIST**

Output Messages   For 4E26 and later generics, the following output messages are modified to add the **PNLCT** field:

- **VER:TSG-TWOWAY**

- **VER:TSG-OUT1WAY**

- **VER:TSG-LIST**

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17 Release Summary - 4E25 Release 1 Generic

Overview

Purpose This chapter summarizes the Input/Output messages, the OS interfaces, new or changed alarms, measurements, and the feature activation summary for the 4E25 Release 1 Generic Product Release Document (PRD). This includes Software Change Packages (SCPs) documented in this PRD.

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Contents   This chapter contains the following topics:

Growth and Retrofit Documents

Growth and Retrofit Documents

The Growth and Retrofit Planning Group reports the following documentation impacts resulting from the 4E25 Release 1 Generic:

- 234-160-025 – 4ESS Switch – 1B Processor 4E24 to 4E25 Generic and 4E25 ODA Update
- 234-185-025 – 4ESS Switch - Generic Retrofit and ODA Update and Planning Scheduling Guide
- 234-160-418 – 4ESS Switch – 4AP17 to 4AP18 Retrofit (3B21D APS Only).

Input/Output Messages

Purpose

The following lists include the input and output messages for the 4E25 Release 1 Generic that are feature-related. A notation is included indicating whether each message is new, revised, or deleted. The feature numbers are included in parentheses ( ).

4ESS Input Messages

The following are 4ESS input messages for 4E25R1. They are included in input manual IM-4B-000-01.

VER:ECOS	REV (6888)
VER:RTNR-RPI	REV (6888)
VER:TSGLIST	REV (7815)

4ESS Output Messages

The following are 4ESS output messages for 4E25R1. They are included in output manual OM-4B-000-01.

VER:ECOS-AREALIS	REV (6888)
VER:RTNR-RPI	REV (6888)
VER:TSG-IN1WAY	REV (5370I, 6685, 7028, 7038)
VER:TSG-OUT1WAY	REV (5370I, 6685, 7028, 7038)
VER:TSG-TWOWAY	REV (5370I, 6685, 7028, 7038)
VER:TSG-TWOWAY	REV (7815)
VER:TSG-OUT1WAY	REV (7815)
VER:TSG-LIST	REV (7815)

4ESS Proprietary Input Messages
The following are 4ESS proprietary input messages for 4E25R1. These messages will be included in proprietary input/output manual 4B-000-01AC.

VER:CODEGRP-PORT   NEW (7070)
VER:CODEGRP-RSVD   NEW (7070)
VER:MISC-ADABLK   NEW (7520)
VER:MISC-FHTOSID   REV (7064)

4ESS Proprietary Output Messages
The following are 4ESS proprietary output messages for Generic 4E25R1. These messages are included in proprietary input/output manual 4B-000-01AC.

VER:CODEGRP-PORT   NEW (7070)
VER:CODEGRP-RSVD   NEW (7070)
VER:MISC-ADABLK   NEW (7520)
VER:MISC-FHTOSID   REV (7064)

OS Interfaces

OS Interfaces   *NOTE*: The information in this item is based on the Project Plan and
the Product Release Document for this release.

Several features in this release interact with various Operation Support
Systems (OSSs). The following features interact with various
Operation Support Systems, including AMA, CDRP, IRAS, NEMOS,
and TOPAS.

Feature	OSS
6888	NEMOS
6938	AMA
7254	DARICS
7312	AMA, CDRP
7323	AMA, CDRP
7335	AMA
7501	DEMS/DARICS
7815	SNOW-T

New or Changed Alarms

New or Changed Alarms   The information in this item is based on the features documented in the
Product Release Document for this release.

There are no new alarms related to the features documented in the
Product Release Document for the 4E25 Release 1 Generic.

Measurements/OSOR

Measurements/On-Site Operations Report (OSOR)

The information in this item is based on the features documented in the current Product Release Document.

Feature 7254 Measurements

Feature 7254 has changes to measurements as follows:

There are two Data Acquisition and Reports Integrated Communications System (DARICS) changes to this feature as follows:

- Measurements related to the seize, release, and occupancy counts of the NR are removed.

- The CR structure sizes are recalculated based on the design of the feature.

The INR is removed from the OSOR and Measurement 17 reports.

Feature Activation Summary

Feature Activation Summary

The following is a summary of how the features documented in the Product Release Document for this release and SCPs are activated.

Feature 521

Grow D-Channel Node Capability From 106 to 130

This feature is activated by software deployment

This feature is dependent on Feature 5361, *Interim D-Channel Expansion* (4E23 Release 1 Generic).

Feature 552

4ESS™ 3B APS Update to RTR 21.30

This feature is activated by software deployment

Feature 5370i

MR to 4ESS™ Switch Local Nodal Customers – Phase 1

This feature is activated by software deployment

Feature 6888

Capacity Relief on 1B Processor Memory

This feature is activated by software deployment

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Feature 6938   **AT&T Digital Link Phase V Architecture**

This feature is activated by a 1B Processor Recent Change using RC Form 809. In order to turn this feature on, existing Feature 5538 (Item PF37) and Feature 5371 (Item PF34) must be turned on. If these features are active in the switch, the FEATURE ITEM field for Feature 6938 is set to **PF73** and the ON OR OFF field is set to **ON**.

The following 3B Recent Change must be performed to turn off the DLN IAM Intercept feature:

1. At the 3B RC/V Channel, build a new file in the *UNIX®* directory using the following command:

    /database/gttx/app_C

2. In the new file, enter the following recent change message:

    RC:SD;SD0000001;F;1:(O,A,48,49)!

3. Activate the file by entering the following message in the 3B application:

    start:fta,app core,file [Your File Name]

4. Verify activation by entering the following command:

    ver:sd;oli

OLI 48 and OLI 49 must be provisioned on RC Form 333 and RC Form 337 per Network Methods and Procedures for the feature to be operational.

The CIVO field on RC Form 634 for the NCA (Cause Value 34) and BT (Cause Value 17) announcements must be set to REL in order to comply with FHT specifications.

The 4ESS feature depends on the activation of the feature in the following network elements:

*   The *5ESS®* electronic switch
*   2DSA/2NCP
*   SD
*   2STP.

This feature is related to or depends on the following features:

*   Feature 5371—*End Office Local Nodal Phase 1* (4E23 Release 1 Generic)

- Feature 5538—*Local Nodal Phase 2.1 8YY Screening* (4E22 Release 4 Generic)
- Feature 6685—*ADL Phase 3–EA Presubscription Capabil*ity (4E24 Release 2 Generic)
- Feature 6990—*ADL Phase 3–EA Dial-Around Capability* (4E24 Release 3 Generic).

Feature 7064   **Further Expansion of the OSPS ID Table**

This feature is activated by software deployment.

This feature is dependent on the following features:

- *Universal T1.5 Access feature* (4570), located in the 4E20 Generic Release 4.

- *Consolidated Access Traffic feature (5308)*, located in the 4E22 Generic Release 4.

- *Expansion of the 4ESS OSPS ID Table feature* (5917), located in the 4E23 Generic Release 1.

- *AT&T Digital Link Phase 3 – Equal Access feature (6685),* located in the 4E24 Generic Release 2.

- *AT&T Digital Link Phase 3 – Equal Access Dial Around Capability Feature (6990),* located in the 4E24 Generic Release 3.

Feature 7254   **Restructure and Grow the Call Register**

This feature is activated by software deployment.

Feature 7312   **Killing Fraudulent SDN/NRA Calls**

This feature is activated by software deployment.

This feature is related to Feature 4312, *Software Defined Network/Network Remote Access Sequence Dialing Using the AT&T Trigger Platform.*

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Feature 7323   **ANC NANP CIC Routing**

This feature provides a new office On/Off parameter, "ANCR". Its values are "ON" and "OFF" and is administered via Recent Change Form 809. The default value is "OFF".

The ANCR office parameter must not be set to "ON" unless all of the office On/Off parameters for Features 5198, 5791, 5840, and 5918 are also set to "ON.". At any time, if any of the Features 5198 (PF30), 5791 (PF49), 5840(PF50), or 5918 (PF52) is set to "OFF", then the *4ESS* switch sets the ANCR office parameter to "OFF" automatically.

This feature is activated using RC Form 809 by setting the ODA bit, OD4PF74, to **ON**. To deactivate this feature, set OD4PF74 to **OFF**.

Feature 7335   **Transfer Connect on ATP-Out-of-Band Trigger and Data Enhancement**

This feature is turned on automatically by software deployment; however it is not operational unless the features on which it depends (listed below) have been turned on also.

This feature is dependent on the following features. All of the following features are already deployed. but each one must be active in the network in order for this feature to work properly:

- Feature 4306—*AT&T Trigger Platform Jr.* (4E20 Release 1 Generic)

- Feature 4867—*Transfer Connect Service 3.0* (4E21 Release 3 Generic)

- Feature 4875—*PACR-ATP Out-of-Band Enhancements for VRU-BT* (4E21 Release 3 Generic)

- Feature 5892—*Transfer Connect Capacity 97* (4E23 Release 4 Generic).

Feature 7344   **1-Digit Translation Table Expansion**

This feature is activated by software deployment.

Feature 7429a **Mandatory 10 Digits on LSP_LOCAL Trunks**

This feature is activated by software deployment.

Feature 7501 **Expansion of LACIDs to Support 856 D-Channels**

This feature is activated by software deployment.

Feature 7701 **Procedure for Growing ATP TSGs**

This feature is activated by software deployment.

Feature 568 **3B20D and 3D21D Disk Replacement**

This feature is activated by hardware deployment.

Feature 7815 **Modified No-Loopback Continuity Check**

For 4E25 generics, the temporary field **S9** on forms 100, 101, 102, 107, 108, and 109 is used to determine whether the No-Loopback Continuity Check Test is allowed or prohibited. The test is applicable only to ISUP trunks. This parameter can have the values:

- Blank or N (DEFAULT) = The No-Loopback Continuity Check Test is allowed.

- Y = The No-Loopback Continuity Check Test is prohibited.

For 4E26 and later generics, the new Trunk Subgroup field **PNLCT** (Prohibit No-Loopback Continuity Check Test) on forms 100, 101, 102, 107, 108, and 109 is used to determine whether the No-Loopback Continuity Check Test is allowed or prohibited. The test is applicable only to ISUP trunks. This parameter can have the values:

- Blank or N (DEFAULT) = The No-Loopback Continuity Check Test is allowed.

- Y = The No-Loopback Continuity Check Test is prohibited.

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7335	Transfer Connect on ATP-Out of Band Enhancement	234-090-251AC
7344	1-Digit Translation Table Expansion	234-090-251AC
7429	Mandatory 10-Digits on LSP_LOCAL Trunks – Part 1	234-090-243AC, Iss 2
7429a	Mandatory 10-Digits on LSP_LOCAL Trunks – Part 2	234-090-251AC
7477	ALAMO (AT&T Local Access Management Option)	234-090-243AC, Iss 2
7501	Expand LACIDs to Support 856 D-channels	234-090-251AC
7506	NAI Call Redirection and LNP Interaction	234-090-243AC, Iss 2
7520	ANC Dial-Around (ADA) Blocking	234-090-243AC, Iss 2
7619	MR to 5645 – Digital Link Ph 2.1 – 8YY Screen	234-090-243AC, Iss 2
7633	MR to 7038 – Support for Deletion of CPN over AATOS Trunks	234-090-243AC, Iss 2
7673	ANC ECR for Operator Services UTA Update	234-090-243AC, Iss 2
7701	Procedure for Growing ATP TSGs	234-090-251AC
7815	Modified No-Loopback Continuity Check (7815)	234-090-251AC, Rev 1

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